



The Florida/Caribbean Exotic Plant Management Team Partnership

By Tony Pernas,
Dan Clark, and
Chris Furqueron

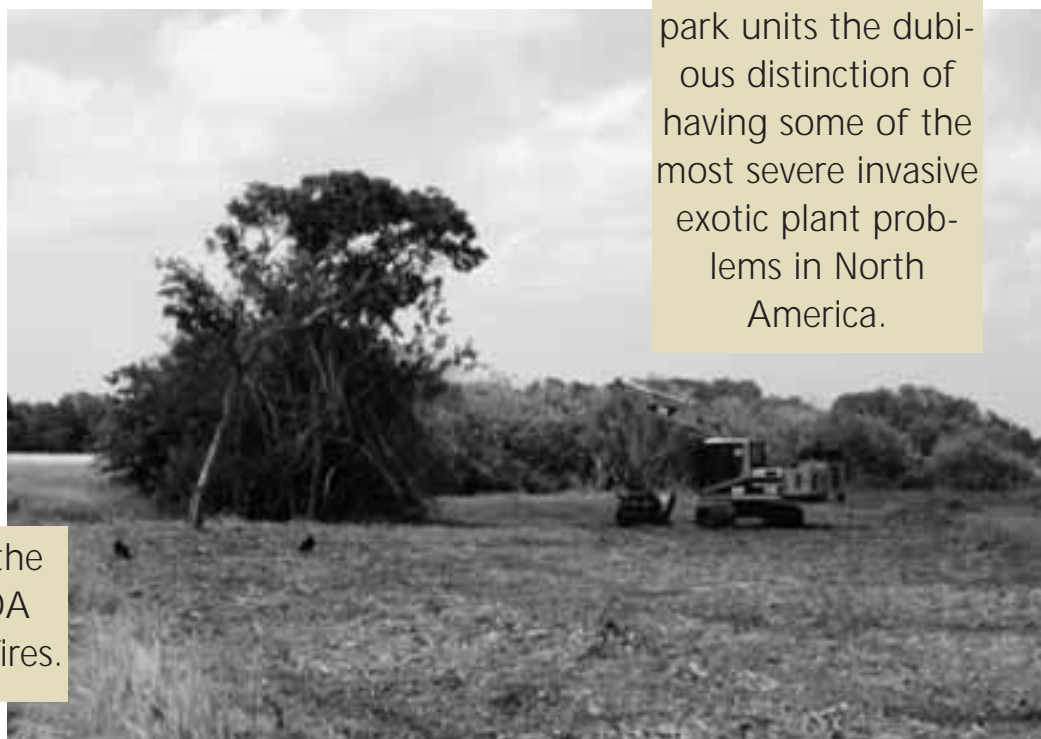
to fight forest wildfires. Each highly trained, mobile strike force of plant management specialists stands ready to assist the national parks in the control of invasive exotic plants. Today 16 teams serve many units of the National Park System in the continental United States, Alaska, Hawaii, and the Virgin Islands.

Florida and lands in the Caribbean Sea are particularly prone to exotic plant invasions because of year-round growing conditions, natural and human-caused habitat disturbances, and the sheer number of species that have been introduced either for ornamental and agricultural purposes or unintentionally. In Florida, exotics infest more than 1.5 million acres (607,500 ha) of the state's natural areas and have spread rapidly to dominate native plant communities, minimize biological diversity, disrupt natural processes such as fire regimes and water flow, and change the landscape both visually and ecologically. More than 400,000 of approximately 2 million acres (162,000 of

More than 400,000 of approximately 2 million acres ... of NPS lands in Florida and the Caribbean are infested with exotic pest plants, thus giving these park units the dubious distinction of having some of the most severe invasive exotic plant problems in North America.

In 2000 the National Park Service established Exotic Plant Management Teams (EPMTs) through the Natural Resource Challenge to control invasive exotic plants on federal conservation lands. These EPMTs are modeled after the “strike teams” used by the USDA Forest Service

These EPMTs are modeled after the “strike teams” used by the USDA Forest Service to fight forest wildfires.



810,000 ha) of NPS lands in Florida and the Caribbean are infested with exotic pest plants, thus giving these park units the dubious distinction of having some of the most severe invasive exotic plant problems in North America.

The Upland Invasive Plant Management Program of the Florida Department of Environmental Protection (DEP) was established in 1997 to curb the spread of exotic pest plants on public conservation lands. Through this program, the state partners, with more than 400 public land managers, work together to control exotic plants. Regional working groups select the projects and on-the-ground control efforts are made by private contractors through service contracts.

In 2000 the Department of Environmental Protection and the National Park Service entered into a partnership to establish the Florida EPMT (FLEPMT). Under this partnership the National Park Service selects and submits projects to the department. Costs for the projects are shared and control is accomplished using private contractors, reducing expenses and increasing efficiency.

In 2003 the FLEPMT expanded to include the U.S. Virgin Islands. This expansion was the result of a cooperative agreement with the University of Florida under a grant from the USDA Subtropical Agricultural Research Program. The name of the team was changed to Florida/Caribbean Partnership EPMT (FLCEPMT).

More protection, less process

The FLCEPMT has completed its fourth year. Since its establishment the team has inventoried and mapped more than 8 million acres (3,240,000 ha) for invasive plants and provided for the initial treatment of invasive plants on 15,281 acres (6,189 ha). Funding for inventory has been from the South Florida Water Management District, U.S. Department of Agriculture, Agricultural Research Service, and Loxahatchee National Wildlife Refuge. Funding for control has been from the National Park Service (Natural Resource Challenge) and is matched by the Florida Department of Environmental Protection. In FY 2000–FY 2003 the National Park Service contributed \$1.528 million, while the Florida Department of Environmental Protection provided \$1.33 million, and the Cooperative Conservation Initiative of the U.S. Department of the Interior funded \$540,000. All of these projects have been successful at controlling invasive plants and have also been very cost-effective. Through the use of private contractors, the cost per acre for control projects has been approximately \$225 (\$91/ha).

The team has undertaken invasive plant control projects at Big Cypress National Preserve; Biscayne, Everglades, Dry Tortugas, and Virgin Islands National Parks; Buck Island Reef and Fort Matanzas National Monuments; Canaveral and Gulf Islands National

Seashores; and DeSoto National Memorial. On four of these units (Desoto, Dry Tortugas, Gulf Islands, and Fort Matanzas), initial treatment of the most invasive plant species has been completed. Significant strides have been made in the other parks receiving funding.

In addition to the success in treating invasive plants, the greatest achievements have been in public education and in developing partnerships with surrounding landowners, such as demonstrated by the following projects:

- The FLCEPMT has entered into a cooperative agreement with the South Florida Water Management District for mapping exotic plants on 8 million acres of natural areas in south Florida.
- In Canaveral National Seashore, an interagency exotic plant control program is in progress. Participating agencies include Volusia County and Merritt Island National Wildlife Refuge.
- In Biscayne National Park, staff working with adjacent landowners assisted in establishing a memorandum of agreement with Miami-Dade County, South Florida Water Management District, and The Nature Conservancy. This agreement, administered by the NPS Southeast Regional Office, works toward achieving maintenance control of exotic plants for the entire south Biscayne Bay ecosystem.
- The FLCEPMT is currently initiating international partnerships to share technical information and conduct joint control projects in the Caribbean.

The Florida/Caribbean Partnership EPMT is involved with more than 400 federal, state, regional, and local cooperators and is broadening its participation to include others. The continued success of EPMTs relies upon building public and private partnerships to efficiently prevent, control, and manage damaging exotic species now and for the future. Exotic weeds recognize no boundaries and cooperative efforts are critical to addressing invasive species control and protecting public natural areas.

More information can be found at the NPS EPMT Web site: <http://www.nature.nps.gov/epmt>.

Tony Pernas is exotic plant management specialist on the Florida/Caribbean Exotic Plant Management Team, Big Cypress National Preserve, Florida. He can be reached at tony_pernas@nps.gov.

Dan Clark is exotic plant management specialist at Virgin Islands National Park, U.S. Virgin Islands; daniel_clark@nps.gov.

Chris Furqueron is integrated pest management specialist at the Southeast Regional Office in Atlanta, Georgia; chris_furqueron@nps.gov.

